DOCUMENT RESUME

ED 107 870 95 CE 003 975

AUTHOR Holder, Harold H.; And Others
TITLE Guided Occupational Orientation Project: Evaluation. Final Report, Volume II.
INSTITUTION Educational Services, Inc., Waco, Tex.; Syracuse City School District, N.Y.
SPONS AGENCY Bureau of Adult, Vocational, and Technical Education (DHEW/OE), Washington, D.C.
BUREAU NO 0-361-0143
PUB DATE 25 Jul 74
GRANT OEG-0-71-1028(361)
NOTE 50p.; For the other volumes, see CE 003 974 and CE 003 976-7

EDRS PRICE MF-$0.76 HC-$1.95 PLUS POSTAGE
DESCRIPTORS *Career Education; Curriculum Development; Curriculum Evaluation; *Elementary Secondary Education; *Integrated Curriculum; Occupational Guidance; Program Descriptions; *Program Evaluation; Program Improvement; Summative Evaluation; Tables (Data); Vocational Development
IDENTIFIERS GOOP; *Guided Occupational Orientation Program

ABSTRACT

The third-party evaluation, divided into six sections, begins with a history and background of the project. The three goals for elementary, junior high, and secondary education were: awareness, orientation and exploration, and job training and placement. In chapter 2, the evaluation of the elementary program (which included only fifth and sixth graders) utilized pre- and post-tests revealing an improvement in awareness and information. Teacher evaluation of the project was also employed. In chapter 3, the evaluation of the junior high program (grades 7-9), utilizing an attitude test, indicated students did not make positive attitude gains. Chapter 4 presents the evaluation of the senior high school programs aimed at the general student population, dropouts, potential dropouts, and under-achievers. Pre- and post-tests results concerning employability and career information revealed positive gains. Tables present the data from all the evaluation tests and ratings. An examination of the programs for under-achievers is provided. In chapter 5, a discussion of the project administration and staff presents the data from teacher ratings that record positive attitudes regarding administrative coordination. Chapter 6 outlines implications and recommendations that call for further evaluation, curriculum revision, teacher support, and expansion of the program. (JB)

ED107870

MAR 31 1975

FINAL REPORT

GUIDED OCCUPATIONAL ORIENTATION TRAINING AND JOB PLACEMENT PROGRAM

EVALUATION

VOLUME II

JULY, 1974

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

CE003975

FINAL EVALUATION REPORT

Guided Occupation Orientation Project

Syracuse City School District
Syracuse, New York

Educational Services, Inc.
WACO, TEXAS
JUNE, 1974

ED107870

FINAL EVALUATION OF THE

GUIDED OCCUPATIONAL ORIENTATION PROJECT

SYRACUSE CITY SCHOOL DISTRICT

Harold H. Holder, Ph. D.

Mary H. Belcher

Lynn Belcher

Eugenia Provence McCown

Educational Services, Inc.

Waco, Texas

July 25, 1974

Prepared for:

Syracuse City School District

Syracuse, New York

CONTENTS

I.	HISTORY AND BACKGROUND	1
II.	EVALUATION OF THE ELEMENTARY PROGRAM	7
III.	EVALUATION OF THE JUNIOR HIGH PROGRAM	18
IV.	EVALUATION OF THE SENIOR HIGH PROGRAMS	27
V.	PROJECT ADMINISTRATION AND STAFF	38
VI.	IMPLICATIONS AND RECOMMENDATIONS	40

CHAPTER I

History and Background

The Guided Occupational Orientation Project (GOOP) was established by the Syracuse City School District (SCSD) in February, 1971, through funds made available under Part D of PL - 576 for Exemplary Projects in Vocational Education.

At the time of this report, the project is completing all work related to the three - year fund cycle including a six months' extension permitted so that results could extend through the last school year.

This report will deal with data, observations and conclusions gathered by Educational Services, Inc. (ESI) of Waco, Texas, independent third party evaluators for the project since June, 1971.

This end of project report by ESI emphasizes the three year span of work represented by GOOP. Evaluators have selected data sets which are indicative of trends and have generally excluded data unique to a single school year.

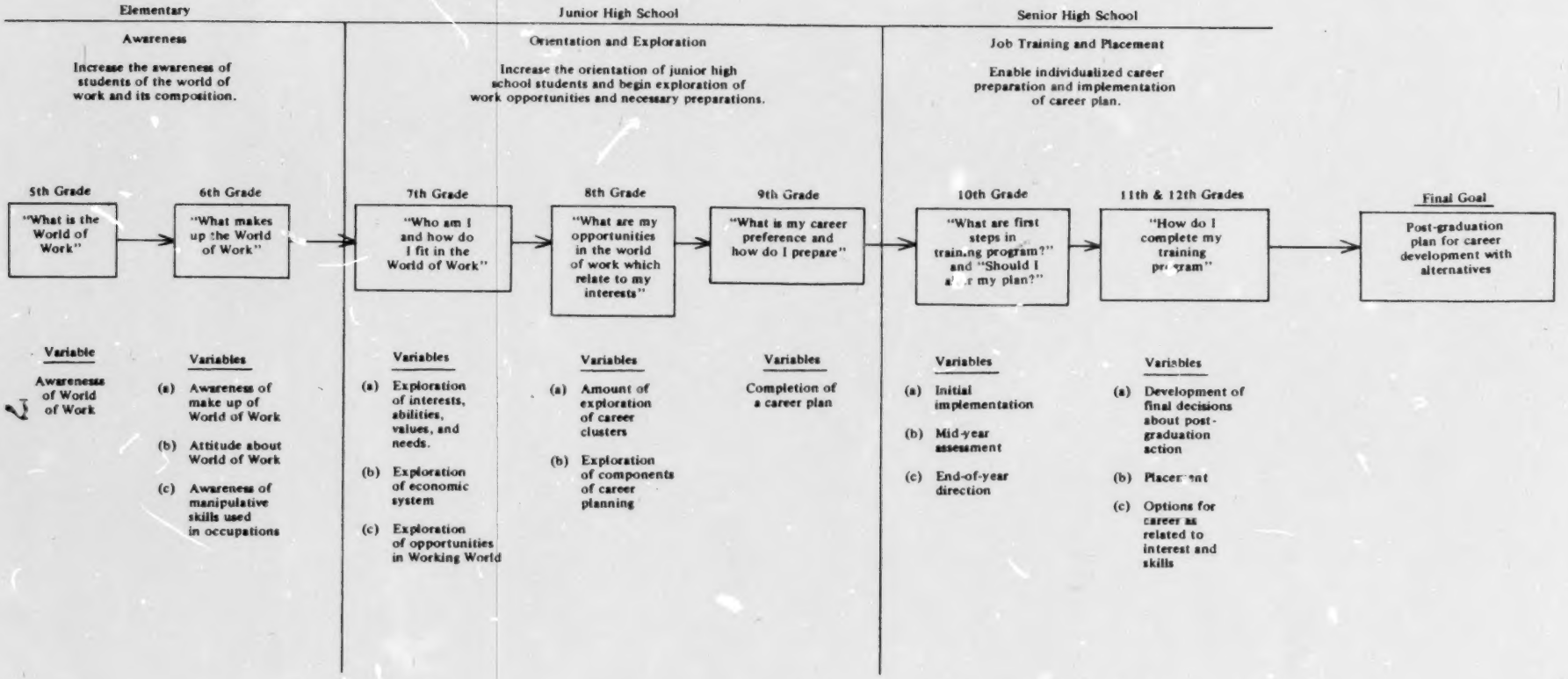
GOOP, as funded and operated, has involved all three grade group populations - elementary, junior high school and senior high school. The complexities of this project, involving large numbers of students and faculty members and affecting diverse areas of the total educational program of SCSD, became unwieldy and confusing to GOOP staff members and administrators of other activities of SCSD. Because of this, ESI worked closely with project personnel and SCSD administrators to develop an overall Master Plan which is designed to aid various publics in understanding the overall project design and flow. This Master Plan is displayed in Chart I.

CHART I

MASTER PLAN

Guided Occupational Orientation Project

Mission: Increase the occupational awareness and facilitate entrance into world of work for students in Syracuse City School District Grade 5-12


Elementary
Junior High School
Senior High School
Awareness
Increase the awareness of students of the world of work and its composition.
Orientation and Exploration
Increase the orientation of junior high school students and begin exploration of work opportunities and necessary preparations.
Job Training and Placement
Enable individualized career preparation and implementation of career plan.
5th Grade
"What is the World of Work"
6th Grade
"What makes up the World of Work"
7th Grade
"Who am I and how do I fit in the World of Work"
8th Grade
"What are my opportunities in the world of work which relate to my interests"
9th Grade
"What is my career preference and how do I prepare"
10th Grade
"What are first steps in training program?" and "Should I alter my plan?"
11th & 12th Grades
"How do I complete my training program"
Final Goal
Post-graduation plan for career development with alternatives
Variable
Awareness of World of Work
Variables
(a) Awareness of make up of World of Work
(b) Attitude about World of Work
(c) Awareness of manipulative skills used in occupations
Variables
(a) Exploration of interests, abilities, values, and needs.
(b) Exploration of economic system
(c) Exploration of opportunities in Working World
Variables
(a) Amount of exploration of career clusters
(b) Exploration of components of career planning
Variables
Completion of a career plan
Variables
(a) Initial implementation
(b) Mid-year assessment
(c) End-of-year direction
Variables
(a) Development of final decisions about post-graduation action
(b) Placement
(c) Options for career as related to interest and skills

The Master Plan displays the overall, long - range mission of GOOP: "Increase the occupational awareness and facilitate entrance into the world of work for students in the Syracuse City School District Grades 5 - 12." This mission is extended into the three major grade groupings with the following goals:

A. Elementary: Awareness - Increase the awareness of students of the world of work and its composition.

B. Junior High School: Orientation and Exploration - Increase the orientation of junior high school students and begin exploration of work opportunities and necessary preparation.

C. Senior High School: Job Training and Placement - Enable individualized career preparation and implementation of career plans.

The elementary program is designed to orient and sensitize students to occupations (The World of Work), tasks demanded of various occupations and the skills required for performance of such tasks. This program was initially implemented during the 1970 - 71 school year utilizing local funds. In February, 1971, support was transferred to the federal funding source. During these four years, 10,335 fifth and sixth grade students have participated in GOOP activities.

The fifth grade program phase was initiated in September, 1972, and deals with the specific goal of "What is the World of Work?" A special social studies unit was developed and utilized in all fifth grade classrooms in elementary schools (31 public and 3 non - public).

The sixth grade program included the following components: Two weeks orientation to the World of Work; two field trips to the career center

located in one elementary school to visit and use display booths explaining a variety of vocational and industrial areas; three weeks of individualized study of selected careers coupled with class activities; two days participation in a mobile skill van trainer to enable students to experience occupational tasks and role playing.

The junior high school segment of the project is directed toward achieving the overall goal: "Increase the orientation of students and begin exploration of work opportunities and necessary preparation."

The junior high school program was implemented in September, 1971, and was dependent on curriculum units developed by teacher writing teams. No pilot testing was undertaken. Curriculum units were introduced on a mass basis. Some materials were not appropriate to grade levels, some suggested activities were not realistic and some listed resources were not readily available. Teacher resistance to utilization of the curriculum units was strong.

These implementation problems were flagged during evaluation procedures in January, 1972. New units were designed, pilot - tested and are now being utilized by English, math, social studies and science teachers in all nine junior high schools in the district.

The junior high school program is directed by a team of Occupational Resource Specialists (ORS) whose tasks include introducing the program, assisting individual teachers and serving as resource coordinators for materials, speakers, field trips, etc.

At the conclusion of ninth grade, each student is expected to complete a written career plan which will map senior high school activities.

The senior high school program is centered around the goal: "Enable individualized career preparation and implementation of career plan." To accomplish this, two complimentary program thrusts are employed. All senior high school students are a target population for increasing awareness for career opportunities. The second population involves drop - outs, potential drop - outs and under - achievers. They are served through the following three program efforts:

A. Occupational Learning Centers (OLC) - Drop - outs and students with severe discipline problems are served in specialized centers detached from the schools. This program provides an individualized approach that is occupation oriented rather than academic. The instructional approach is combined with actual work experience and/or vocational training.

B. Occupational Resource Teachers (ORT) - This program phase serves potential drop - outs and under - achievers. However, students are kept in the mainstream of school and given work experience opportunities.

C. Program for the Advancement of Career Education (PACE) - SCSD and Onondaga Community College are cooperating to offer PACE. Since its inception, PACE has emphasized distinctive features in furthering the goals of career awareness and skill level attainment among high school students. Means of achieving these goals are through an interdisciplinary approach that includes classroom projects and related field trips.

Through PACE, under - achieving students are motivated to remain in school through graduation and then participate in an associate degree

program at Onondaga Community College. PACE activities center around four job families - Paramedical, engineering, retail business management and secretarial.

CHAPTER II

Evaluation of the Elementary Program

The elementary program includes only fifth and sixth grade students, with the first year (1971 - 72) including only sixth graders. Since the first component of the overall career education project was elementary, some of the evaluation data were collected in 1970 - 71.

The goals for the elementary program and results for the three years are reviewed in the following sections:

Goals for Students

A. Fifth grade students will increase their awareness of the broad families of jobs, employment requirements, personal abilities and interests in relation to various occupations.

Indicators of increased awareness were mean scores on an orientation test administered in the fall and spring. Scores for a random sample of students covering a three year period are shown in Table 1, including the one year in which only sixth grade students participated.

Table 1

Elementary Orientation Test Mean Scores

	Pre-Test	Post-Test	Difference	Sample Size
6th Grade* 1971 - 72	15.59	18.60	3.01	Pre = 171 Post = 146
5th Grade 1972 - 73	18.06	22.38	4.32	314
1973 - 74	17.7	21.6	3.9	248

*Only school year in which the 6th grade participated in orientation program. In subsequent years, only 5th graders were involved in such orientation, while 6th graders were involved in a more inclusive program.

Students showed improvement each year in orientation test scores with a mean gain of 3 to 4.5 points.

B. Sixth grades students will increase their level of awareness of the fundamental concepts and procedures related to the world of work.

Indicators of level of awareness are mean scores on a unit test for career concepts administered before students begin the career education sequence in their classrooms and upon completion.

Scores for the past two school years are shown in Table 2, based on a random sample of students. Gains are shown each year, even though the post test scores in 1973 - 74 are lower than the previous year (9.7 vs 11.5).

Table 2

Sixth Grade Awareness of the World of Work

	Pre-Test	Post-Test	Difference	Sample Size
1972 - 73	8.25	11.15	2.90	187
1973 - 74	6.3	9.7	3.4	226

(Mean scores)

B. Sixth grade students will increase their level of awareness of the fundamental concepts and procedures related to the world of work.

Indicators of level of awareness are mean scores on a unit test for career concepts administered before students begin the

C. Sixth grade students will increase their knowledge of the career ladder concept in local business and industry.

Indicators used are mean scores based on a career ladder concept test administered in 1972 - 73 and a career centered concept test administered in 1973 - 74. These tests were administered before each elementary classroom began the program and immediately after completion.

Scores based on a random sample of students and covering two school years (with a different test given each school year) are shown in Table 3. The 1972 - 73 test, which showed only slight gains, was an inadequate instrument and a new test was developed for use in 1973 - 74. The new instrument tested student awareness of people in jobs, tools in jobs and a combination of the two. Scores in 1973 - 74 showed a significant increase (10.6 vs. 16.6).

Table 3

Six Grade Career Concept Mean Scores

	Pre-Test	Post-Test	Difference	Sample Size
1972 - 73*	5.799	6.276	0.69	N.A.+
1973 - 74**	10.6	16.6	6.0	1,284

* Based on a career Ladder Concept Test

** Based on a revised and expanded instrument, the Career Center Concept Test

\+ Not Available

D. Sixth grade students will increase their level of occupational awareness of particular job families. Indicators are mean scores on pre and post tests used with individualized career studies of specific employment areas. Results for two years, based on a random sample of students, are shown in Table 4. Post test scores in both years are higher than pre test, indicating student change in the desired direction.

Table 4

Sixth Grade Mean Test Scores
On Occupational Awareness of Particular Job Families

	Pre-Test	Post-Test	Difference	Sample Size
1972 - 73	6.37	8.52	2.15	468
1973 - 74	6.5	8.2	1.7	501

E. Sixth grade students will increase their awareness of skills used in at least three occupations based on their experience in the Skill Van Trainer.

Pre and post tests were administered to all students prior to entering the Skill Trainer Van and upon completing the week - long program. Results for three years are shown in Table 5. A growth in skill awareness is indicated in each year.

Table 5

Sixth Grade Skill Areas Tests (Skill Trainer)

	Pre-Test	Post-Test	Difference	Sample Size
1971 - 72	5.36	11.3	5.94	Pre=125, Post=104
1972 - 73	3.75	7.03	3.28	Pre=895, Post=720
1973 - 74	3.50	7.66	4.16	Pre=844, Post=844

Goals for Elementary Teachers

A. Fifth grade teachers will utilize program materials made available by the Career Center as indicated by class lists showing 100% involvement of their students and a minimum of ten hours spent on the program.

In 1972 - 73, 58 classes participated, with an average of over 21 classroom hours spent on career education. In 1973 - 74, 90 classrooms participated with an average of over 21 classroom hours. In both years teachers' reports indicated that all their students participated.

B. Sixth grade teachers will encourage students to pursue individualized instruction in career education, with an average of at least 2.0 Individualized Career Study packets completed for students.

Students could select from distinct career areas and study as many as they desired, so the average number per student of ICS packets has been used as an indicator of individualized study. The average number of packets completed per student over a four year period is shown in Table 6. In each school year the average per student was more than 2.0.

Table 6

Individual Career Study Packets Completed - Sixth Grade

	Mean # of Packets Completed	Sample Size
1970 - 71	2.43	871
1971 - 72	2.17	171
1972 - 73	2.43	1,006
1973 - 74	2.20	1,284

C. Sixth grade teachers will consider the elementary career education program worthwhile.

To provide feedback about teacher experience and perception, every year each teacher completed an evaluation report rating various components and aspects of the program. The areas which were rated included:

1. Individual Career Study Packets (ICS)
2. The Skill Van Trainer
3. Student grade changes during the program
4. Overall value of career education

The three year responses to these areas are shown in Table 7. Less than 12% of the teachers consider the ICS packets "not very valuable" or "a waste of time." A significant improvement is the teacher rating of the packets as "absolutely essential" from 1971 - 72 where less than 20% gave this rating. It is important to note that 1973 - 74 ratings are down some from the previous year and that the higher percentage of teachers (11.98%) giving unfavorable ratings occurs in the last year of the project.

Teacher ratings of visits to the career center were still high in the last year, but the general assessment was less positive than the previous year.

Teacher evaluation of the skill van trainer remained highly positive throughout, but again an important percentage (9.52%) rated the trainer as "not very valuable" and "a waste of time" in this

last school year, as contrasted with no negative responses in two previous years.

The pattern in teacher evaluation of program components is connected with their perception of changes in student motivation during the program, i.e., 1973 - 74 ratings are not as good as the previous year. However, over 78% of the teachers in 1972 - 73 and 1973 - 74 believe students' motivation improved.

Overall, teacher evaluation of career education for elementary students is positive, with less than 10% believing it to be "not very valuable" or "a waste of time."

Table 7a

Teacher Rating on Individual Career Studies

Teachers' Evaluations	1971 - 72	1972 - 73	1973 - 74
Absolutely Essential	17.3%	53.7%	40.47%
Very Valuable	34.5%	17.1%	28.57%
Valuable	44.7%	26.8%	19.04%
Not Very Valuable	3.5%	2.4%	9.52%
Waste of Time	-0-	-0-	2.38%

Table 7b

Teacher Evaluation of Career Center Visits

Teachers' Evaluations	1971 - 72	1972 - 73	1973 - 74
Absolutely Essential	37.0%	53.7%	47.61%
Very Valuable	48.2%	22.0%	28.57%
Valuable	14.8%	24.4%	16.66%
Not Very Valuable	-0-	-0-	7.14%
Waste of Time	-0-	-0-	-0-

Table 7c

Teacher Evaluation of Skill Trainer

Teachers' Evaluations	1971 - 72	1972 - 73	1973 - 74
Absolutely Essential	42.4%	58.5%	52.38%
Very Valuable	34.6%	19.5%	28.57%
Valuable	23.0%	17.1%	9.52%
Not Very Valuable	-0-	-0-	4.76%
Waste of Time	-0-	-0-	4.76%

Table 7d

Teacher Assessment of Sixth Grade Changes During Program

Student Motivation	1971 - 72	1972 - 73	1973 - 74
Improved	54.0%	85.4%	73.8%
Stayed the Same	36.0%	14.6%	23.8%
Deteriorated	10.0%	-0-	2.4%

Table 7e

Teacher Assessment

Career Education Study by Elementary Students

Teachers' Evaluations	1973 - 74
Essential	30.95%
Very Valuable	28.57%
Valuable	25.19%
Not Very Valuable	11.90%
Waste of Time	2.38%

Goals for Parents

A. Each fifth grade student will be able to utilize at least one parent or guardian as a resource person to learn about the adult's occupation.

In both years of the fifth grade program, almost all students were able to complete adult interviews.

B. At least five percent of sixth grade parents will participate in the program in some way.

In 1972 - 73, 18.6% of the parents visited classrooms during the program, while less than one percent visited classrooms in 1973 - 74. In both years, parents chaperoned field trips, provided career materials and made classroom presentations.

Goals for Business and Industry

Only one goal was used for business and industry - local businesses and industries will participate in the career education program by:

1. Maintaining 27 career exhibit booths;
2. Each classroom being visited by at least two career representatives from business and industry;
3. Allowing classroom field visits for at least 80% of those able to do so.

Indicators of business and industry participation are shown below for these school years.

	1970 - 71	1971 - 72	1972 - 73	1973 - 74
Total contacted	32	47	NA*	NA*
Developed or participated in a booth	21	26	26	26
Visited schools	8	24	avg. 4 visits per classroom	NA*
Allowed field visits for those who could have visits	10	15	23	NA*

(Field trips during the year were discouraged because of the gasoline shortage.)

*NA = Not Available

In general, the support and participation of local business and industry for the elementary programs was good based on all available indicators.

Observations

A. The fifth grade program is achieving its goals of increasing student career awareness, teacher participation and parent participation.

B. The sixth grade program has been successful in increasing student awareness of the world of work, specific career concepts and career areas according to the tests administered.

C. Sixth grade students, as a result of their participation in the mobile skill van trainer, have shown increased knowledge of skills and techniques for general career areas.

D. Teachers (both fifth and sixth grade levels) are highly supportive of the program in general and of each of the specific program components. This support, while remaining positive during 1973 - 74, decreased over the previous year. At the end of the three years, over 83% of the participating teachers considered career education valuable.

E. Local business and industry continued to provide regular support, encouragement and participation in the program.

CHAPTER III

Evaluation of Junior High Program

The junior high school component of GOOP has been phased so that only during the third year have all the grades (7, 8 & 9) had specialized curriculums. Consequently, the evaluation process has included the available data by grade level over as many school years as was available.

Following are project goals for students (by grade level), teachers, parents, and business and industry with results for the years in which data were obtained.

Goals for Students

A. All students will increase their positive attitudes toward career planning as shown by improved scores on an attitude test.

The fall and spring composite scores for students by year and grade level on a 5 - point scale indicating attitudes toward career planning are shown in Table 8.

The overall picture is one of little or any improvement in attitude across most grades and years, with the exception of the eighth grade in 1971 - 72. The consistently tracked student group (seventh in 1971 - 72, eighth in 1972 - 73, and ninth in 1973 - 74) showed only slight improvement over the three years, going from 3.48% in the fall of 1971 to 3.70% in the spring of 1974.

The following information is submitted to qualify points of issue in the Final Evaluation Report, Guided Occupational Orientation Project, Syracuse City School District, prepared by Educational Services, Inc., Waco, Texas

In reviewing the report there is a great deal of concern regarding the impact of the junior high program.

There is an indication that students did not make significant increase in their positive attitudes toward career planning as indicated by the attitude test. There may be several reasons for this result.

A) The Instrument -

1. The instrument was made up after the first year curricula materials were developed. When these materials were found to have shortcomings, they were revised along with the method of implementation in schools. However, our evaluation instrument couldn't be revised because it was necessary to maintain continuity through the three-year testing. Therefore, the instrument was not measuring actual activities taking place in schools.

2. The format of the instrument proved to be confusing to many students (see attached copies, Example, 7th grade - starts at No. 20.)

3. The questions and answers proved to be difficult for the designated grade level. Many phrases were completely new concepts and we now find that they should be covered at the senior high rather than junior high level.

4. Because of the many problems and time involved in evaluating, it was agreed that we would not use the instrument the third year. (One Occupational Resource Specialist did administer the pre-test). However, personnel from E.S.I. asked us to obtain spring results.

5. The data presented did not include raw data pertaining to the number of students taking the test. All pre and post test results indicate a mean score of 3+ on a 5 point scale. The actual impact regarding change might be better indicated using the total number of students involved and a comparison of the shift reflected by a median score for pre and post tests.

B) Method of Implementation

Many teachers spread their career education activities throughout the school year (field trips, Career Days, etc. are held in spring when the weather is more predictable). Because of this, the post-testing cannot be done until June. By this time many students have been changed in or out of control groups and those remaining were preoccupied with final exam preparation. This hindered the post-testing phase.

C) Lack of Sophistication Regarding Evaluation

The evaluation of the program was a combined effort of E.S.I. and the School District. Research personnel from the school district were not involved by the project staff and should have been. Communication was sometimes difficult simply because of the distance involved between Syracuse and Waco, Texas. This does not in any way qualify the evaluation result but does suggest that the school district has become more sophisticated in its utilization of third party evaluation.

D) Positive Results

There were positive results of the junior high program. These are indicated under Observations on pages 25 and 26 of the report. Most of the observations which cover the several facets of the program are positive. These, however, are overshadowed by the results attached to the students' responses to the attitude test.

In general, the attitudes of students, at least as measured by the attitude instrument employed, are "neutral" to "slightly positive" about career planning.

Table 8

Junior High Attitudes Toward Necessity of Career Planning

(Expressed as Mean Scores)

	7th Grade		8th Grade		9th Grade	
	Fall	Spring	Fall	Spring	Fall	Spring
1971 - 72	3.48	3.38	3.50	4.59	3.60	3.69
1972 - 73	3.58	3.60	3.55	3.74	3.78	3.77
1973 - 74 All students	*	3.53	*	3.74	*	3.70

(5 item attitude scores)

* Pre-test not given to sample of all junior high students.

B. Seventh grade students will increase their awareness of resources for vocational guidance as shown by check lists administered on a pre and post test basis.

The percentages of seventh grade students who indicated by year they had "used" each resource listed are shown in Table 9. There is an increased utilization by students of guidance counselors, ads and want ads, employer interviews, private agencies and civil service labor unions over the two school years. Others either remain the same or show mixed results (increases in one year and decreases in a subsequent or preceding year). Clearly, guidance counselor contacts increase

during the seventh grade. Spring results for the third year (with no fall responses) show generally lower frequency of use for each resource category compared with the spring frequencies for 1972 - 73. This was a disappointing finding.

C. Students will complete seventh grade with increased awareness of and familiarity with career cluster concepts as indicated on a career cluster test.

The three year fall and spring average scores for seventh grade students are shown in Table 10 on a 12 - item test of career awareness. In general, spring scores are higher than fall in each year, though across the three years the average scores for each year drop.

During the first year, eighth and ninth grade students were also using seventh grade materials. Their test results (which show improvement) are shown in Table 10. In subsequent years, the eighth and ninth grades had their own specialized materials.

D. Eighth grade students will explore at least five career clusters in increasing their awareness of possible career clusters for in depth study in the ninth grade.

In 1972 - 73, in five of the nine junior high schools, more than 10 clusters were explored, and in the remaining four schools five or less clusters were explored. In 1973 - 74,

Table 9

Career Information Sources Used by Seventh Grade Students

Percentage of Sample Indicating Use

Information Source	1971 - 72 Fall	1971 - 72 Spring	1972 - 73 Fall	1972 - 73 Spring	1973 - 74* Spring
1. Guidance Counselors	18.8	37.5	29.4	40.9	25.1
2. Teachers	48.6	51.5	48.7	48.2	27.7
3. Relatives	55.6	54.4	46.2	54.4	32.3
4. Friends	64.6	55.9	54.3	54.9	33.1
5. Field Trips	33.3	41.2	44.2	34.2	24.6
6. Ads and Want Ads	30.6	42.6	27.9	33.2	26.9
7. Interviews with Employers	21.5	29.4	20.3	29.5	14.6
8. N.Y. Employment Agency	12.5	12.5	15.2	20.2	12.3
9. Private Agencies	9.7	11.8	15.7	19.2	10.8
10. Chamber of Commerce	9.7	8.8	15.7	14.5	11.5
11. Civil Service	6.9	9.6	13.2	15.0	10.0
12. Labor Unions	9.0	10.3	13.7	17.1	9.2
13. Professional Societies	11.1	11.0	13.7	15.5	9.2
14. Colleges and Schools	23.6	19.1	24.9	25.4	13.1
15. Government Agencies	9.7	8.1	15.7	19.2	10.0
16. Libraries, Schools, Books, etc.	55.6	68.4	60.4	55.4	31.5
17. Military Recruiting	13.2	5.9	15.2	22.3	10.0
Total Students	144	144	197	193	130

*No Fall check list was administered.

Table 10

	Seventh		Eighth		Ninth	
	Fall	Spring	Fall	Spring	Fall	Spring
1971 - 72	6.45	7.0	6.8	7.4	7.2	7.8
1972 - 73	5.8	6.4	N.A.	N.A.	N.A.	N.A.
1973 - 74	*	5.92	N.A.	N.A.	N.A.	N.A.
One School - Grant	5.06	6.46	N.A.	N.A.	N.A.	N.A.

N = 16

*Test not given to a random sample in this grade representing all students

the average number of clusters explored by 1,826 participating eighth grade students was 11.2.

E. By the end of the school year, at least 85% of the ninth grade students will have completed a written future education plan for use in high school.

Table 11 shows the number of students completing a plan by the end of the school year. In 1972 - 73, about 20% failed to complete any plan. In 1973 - 74, 14.61% had no plan, 28.18% completed a Career Planner, 4.47% completed another form of a written plan and 53.37% had a non-written plan.

Table 11

Total Percentage of Ninth Grade Students With Plans at the End of the School Year

1971 - 72	1972 - 73	1973 - 74
No data collected	80.00	85.39

Goals for Teachers

A. Every junior high classroom teacher of math, science, social studies and English will participate in the program in some manner.

Table 12 shows the amount of teacher participation by category during the two years in which data were collected. In 1972 - 73, only one percent were "non - participants", which increased to 14% in 1973 - 74. There was a decrease in number of teachers who are extensively involved in the third year.

Table 12

Teacher Participation

	1972-73	1973-74
Non-Involved	1%	14%
Moderately Involved	31%	59%
Extensively Involved	67%	25%

B. On the average, participating teachers will utilize resource materials made available by the program as indicated by at least seven requests and/or library check - outs of materials.

Average teacher requests for materials and/or assistance from the occupational resource specialists were 2.2% for 1972 - 73, and 3.6% in 1973 - 74. While data on the number of requests per teacher were not kept by school libraries, there was an average of 705 requests for career education materials over the six junior high schools.

Goals for Parents

The only goal for parents was increased awareness of career education opportunities for students as a result of exposure to information about career education. Indicators of exposure are shown in Table 13. A significant medium for parental exposure is the letter sent with students for permission to go on a field trip, which contains a form requiring parental signature of approval. The letter denotes both the purpose of the trip and the career education program in general.

Table 13

Indicators of Parental Exposure

	1972 - 73	1973 -74
PTA Presentations	11	N.A.
Newspaper Articles	11	15
Parental letters	N.A.	-0-
ORS meetings with parents	N.A.	223

Goals for Business and Industry

The one goal for business and industry was that at least 75% of businesses and industries contacted by the program would react favorably to inquiry.

The number of inquiries and favorable responses are shown by year below:

	1972 - 73	1973 - 74
Total inquiries for trips, speakers, information, etc.	327	374
Percentage of favorable responses	95.1%	96.3%

Observations

A. The junior high program has had limited success during the three year period in improving the attitude of students toward career education.

B. Seventh grade student awareness of resources for career information increased over the three year period with the main gain in use of guidance counselors.

C. Career awareness of seventh grade students increased somewhat based on pre and post test scores, but in general, the gains on the tests were not substantial.

D. Eighth grade students, as a part of the program emphasis on having career education in English, math, science and social studies classes, explored a number of career clusters.

E. A most significant goal of the junior high program was the preparation of written career plans by ninth grade students,

but only about one - third had written plans for guiding their studies in high school. However, between 80 and 85% of the students did report some type of plan, primarily non - written.

F. While highly resistant during the first year of the program, junior high school teachers have increased their acceptance of the program and utilization of program materials in the last two years.

G. Parental response to information about the program was high, but no indicator of parental awareness was available.

H. Business and industry were supportive.

CHAPTER IV

Evaluation of Senior High School Programs

As discussed in Chapter I of this report, the senior high school program is divided into two complimentary thrusts. One is directed toward the general student population and the second is directed toward drop - outs, potential drop - outs and under - achievers.

Information dissemination concerning careers and job - related publications is directed toward all students grades ten through twelve. Five times each school year Occupational Resource Specialists publish "Career Scene" and distribute 7,000 copies to all senior high school students. Efforts are also made to secure enough copies of career - oriented publications to distribute among students.

A mini course relating to employability skills has been developed and is now available to all senior high school students.

The remainder of the program is directed toward drop - outs, potential and under - achievers through the programs conducted by Occupational Learning Centers (OLC's), Occupational Resource Teachers (ORT's) and Program for the Advancement of Career Education (PACE).

Senior Employability Orientation

For two years, an optional mini - course for seniors in all four high schools has been made available. In 1972 - 73 almost 100 students participated in the course; in 1973 - 74, 680 students participated. Table 14 shows results for the two years of the program. Pre and post test results concerning information about employability showed positive gains and also that these participating seniors already were highly informed.

(27)

Table 14

Senior Employability Orientation

Senior High Schools

	Central		Corcoran		Hinniger		Nottingham	
	72-73	73-74	72-73	73-74	72-73	73-74	72-73	73-74
1. Information about employability average correct score. a. pre-test	80%	75%	85%	*	*	82%	86%	75%
b. post-test	80%	78%	90%	*	*	86%	98%	95%
2. Skill in preparing acceptable job application.**	54%	80%	60%	*	60%	65%	75%	70%
3. Total students participating.	25	31	40	60	16	560	16	29
4. Overall participation. 1972 - 73 = 97 1973 - 74 = 680								

* No comparable data available

**Rated on neatness, clarity, completion

Percentages for acceptable job applications completed were generally 60% or over; 1973 - 74 percentages improved in two schools, including an increase from 36% to 80% for Central Tech.

ORT Program

The indicators of success for the ORT program are the number or percentage of students who have:

A. Remained in school - desired level is 80%.

B. Completed the program (those remaining in school) - desired level is 75%.

C. Received credit of work experience - desired level is 40%.

D. Been employed for at least two months - desired level is 70%.

E. Received positive ratings by employers - desired level is 75%.

The actual results, when available, for ORT students for two or three school years are shown in Table 15. Desired levels are also shown.

Over 500 students were involved in each of the three years, with over 90% remaining in school each year.

Of those who remained in school:

A. 78% completed the ORT program.

B. 56 to 63% received work experience credit.

C. 65 to 82% were employed for at least two months.

D. 83 to 91% received "satisfactory" to "excellent" ratings by employees.

Except for the employment percentage in 1972 - 73, all indicators for those years in which data were collected exceeded the desired levels. (See Table 15)

A significant factor in the ORT program is the availability of one person (the ORT) who accepts responsibility for helping each student receive

Table 15

ORT Student Results

	1971 - 72	1972 - 73	1973 - 74	Goal
1. # Students Involved	505	554	592	N.A.
2. Total Students Remaining in School	*	515 93.5%	572 96.6%	80%
3. % of Those Remaining in School who Completed Program	*	78.4%	78.0%	75%
4. % of Those Remaining in School who Receive Credit for Work Experience	*	56.2%	63.0%	40%
5. % of Those Remaining in School who Were Employed at Least Two Months	*	65.3%	82.0%	70%
6. % of Students Receiving "Satisfactory" to "Excellent" Ratings by employers.	83%	86.4%	91.0%	75%

* data not gathered in 1971 - 72

counseling and assistance for personal, social, educational and career needs. This inclusive approach and single point responsibility enables each student to develop an educational/employment program tailor - made to his or her situation.

Overall, this program was most successful in realizing the impact for the target students for which it was designed.

Occupational Learning Centers

This program is aimed at high school drop - outs and is designed to increase basic skills in reading and mathematics, provide a satisfactory

employment experience linked to continuing education and increasing the students' self awareness and personal esteem.

Table 16 shows the average grade level gains for students in reading comprehension and math for each of three school years. Except for the first year of mathematics, which had a grade level gain of .91, the remaining categories indicate a change in grade level gain of over 1.0. This seems to indicate that students are accelerating their academic gains during the year. At the end of each school year, the average grade level is higher than the preceding year for both math and reading.

Table 16

OLC Average Student Grade Levels
On Metropolitan Standardized Tests

	Pre (At Entry)	End of School Year	Grade Level Gain
1. Reading Comprehension 1971 - 72	6.52	7.95	1.43
1972 - 73	6.46	7.86	1.40
1973 - 74	6.87	8.29	1.42
2. Math 1971 - 72	7.03	7.94	.91
1972 - 73	6.43	8.03	1.60
1973 - 74	6.80	8.34	1.54

Other indicators of student changes are shown in Table 17 for three school years along with the desired level for each indicator which the program set for itself. In addition, this table includes the improvement in percentage of attendance for OLC students participating in the program during the school year compared with their attendance record in regular school years.

Table 17

OLC Student Outcomes

	1971 - 72	1972 - 73	1973 - 74	Goal
1. % Gain in Attendance at OLC vs. Regular School	17.3	34.6	38.8	25%
2. % Students Successfully Employed	N.A.	62.6	64.3	Students Experience Success
3. % Completing Prescribed Study Objectives.	N.A.	51.6	70.0	100%
4. % Completing Prescribed Awareness Objective	N.A.	60.6	80.2	100%
5. % Completing Career Plans	N.A.	51.6	75.0	100%

N.A. = data not available

Over 60% of the OLC students were employed during 1972 - 73 and 1973 - 74. From 51 to 70% completed their prescribed study objectives, from 51 to 75% completed their career plans and from 60 to 80% completed their prescribed awareness objectives. In the last year the percentage completing their objectives is shown to be substantially higher than the previous year.

To examine the long - term impact of the OLC program, 38 students who entered the program in 1970 - 71 were followed up in June, 1974. The following breakdown indicates the status of their program with reference to school and/or employment.

Successful Status		60%
Graduated	37%	
Transferred back to parent school	13%	

Entered skilled employment	5%	
Entered armed forces training program	5%	
Unsuccessful Status		26%
Dropped out of school	26%	
Other		13%
Moved from district	10%	
Deceased	3%	

Of the 38 students followed, 60% had an educational/employment status which can be considered successful for OLC students. Only 10 students (26% of the total) dropped out of school without skilled employment or a follow-up training program. A total of 19 (50%) of the 38 students became high school graduates through regular graduation or by passing a high school equivalency test.

The present status of these students is:

Full time employed or homemaker	53%
Continuing in high school or enrolled in institution of higher learning full time	13%
Incarcerated	5%
Unemployed	13%
Status unknown or deceased	16%

Six students are enrolled in college or have graduated from junior college, including two who will enter college in September and three with 15 to 30 completed college credits.

The overall record of success of the OLC program for high school dropouts is remarkable and clearly demonstrates the value of such a program with this student population.

PACE Program

The PACE program goals relate to the following areas:

A. Pursuit of post - secondary education

B. Increased achievement levels

C. Decreased school absences and/or dropouts

A total of 58 tenth grade, 76 eleventh grade and 87 twelfth grade students from high schools have been involved in the program. One school, Central, discontinued the program during the last year.

During the 1973 - 74 school year, 81 of the 82 PACE seniors (99%) made application for post - secondary education, mainly at Onondaga Community College. While it is expected that all will be admitted, total admissions will not be known until the fall. In 1972 - 73, 87% applied and 85% were admitted. Accordingly, most of the PACE students were motivated to seek post - secondary education.

Grade point averages over the three years of the program, compared with the average before entering the PACE program, produce mixed results - sometimes PACE averages are higher, sometimes lower. Looking over all study areas by schools, there does not appear to be a pattern of consistent overall improvement in grades while students are participating in the PACE program. However, students in the secretarial and business management sequences have tended to improve their grade averages each year.

Dropouts include 13 students who left school in 1972 - 73 and nine who left school in 1973 - 74. The number of student absences during the three

years of the PACE program shows no substantial difference from the number of student absences in prior years; that is, PACE students' school attendance records have not improved during the program.

To determine perceptions of the program, students were asked to rate the program anonymously "as others saw it." The results are shown below:

Question: "On the whole, how do students who know about it seem to feel about the PACE Program?"

	September, 1972	June, 1973	June, 1974
Very favorably	10%	6%	12%
Somewhat favorably	64%	54%	52%
Rather favorably	21%	27%	22%
Very unfavorably	5%	13%	14%

On the average, students feel positively about the program though around 10% feel "very unfavorable." Since only a like percentage are strongly positive, one can infer that students, while supportive of the program, are not enthusiastic or excited by it.

A follow - up study during 1974, of 21 of 36 PACE students who did not attend Onondaga Community College upon graduation indicates the following results:

A. Over 70% are working full - time, mainly in jobs related to their training field.

B. Six are full - time students.

C. The former students generally felt the PACE program to be interesting and better than other available options. No one found it dull and all but one student found the course useful.

The conclusion reached by the Cornell researcher was: "The

data support the conclusion that the objectives of PACE were essentially achieved as perceived by the respondents."

Observations

A. The optional mini - course for seniors was popular, but appeared to attract many students already highly informed about employability. The percentages of students able to obtain acceptable employment ranged between 54 and 80% over a two year period.

B. The occupational teacher program met all its goals during the two years in which data were collected.

C. The Occupational Learning Center met its goals or achieved remarkable results with high school dropouts. Specific results were:

   1. A gain of over one grade level each year in reading comprehension and math.
   2. A marked improvement in school attendance.
   3. The employment of over 60% of the group.
   4. The completion of objectives for study, personal awareness and career plans by 50 to 80% of the group.

D. A four year follow - up study of OLC students shows that:

   1. Ten of the 38 students actually dropped out of school.
   2. 50% graduated or received high school equivalency credit.
   3. Only seven of the 38 students were in jail or unemployed. The remainder were employed, in school or were homemakers.
   4. Only five could not be followed up.

E. The PACE program met its main goal, the continuation of students into post - secondary education, even though grade point averages and school attendance did not substantially improve during PACE. The response of students is generally favorable, and a follow up of students who were not attending Onondaga Community College showed them supportive of the program.

CHAPTER V

Project Administration and Staff

During the three year history of the Guided Occupational Orientation Project, overall administration has functioned effectively. Difficulty has been experienced throughout in tying together the highly diverse program components into a sound administrative accountability structure.

During the 1973 - 74 school year, four different people served as project coordinator. Although this was an unavoidable occurence, caused by resignation, death and reassignment, it is to be regretted that strong project administrative continuity could not be maintained for the final year.

Small regressions in data outcomes which were detected in the elementary program might possibly be attributed to the fact that the professional instructional specialist who had guided this program segment for three years was reassigned and had only cursory responsibilities for day-to-day program implementation.

Regression also occurred in some data related to junior high school programs. The results of an attitude survey administered to junior high school faculty members concerning their perceptions of the Occupational Resource Specialists are of some significance in assessing this event. While 66% of the teachers reported familiarity with the role of the ORS, only 53% rated ORS as "supportive" or "very supportive" of classroom work.

Fifty percent of the teachers replied that contact with ORS was "limited." Only 33% rated contacts as "regular" to "very often."

Concerning the role of ORS in utilizing career education and materials, 57% felt they had received aid, while 43% felt they had not. Conversely, 71% felt that ORS are necessary if career education is to continue in junior high school.

It would appear that ORS are known and their role understood, but that support of classroom teachers and person - to - person contact has been somewhat limited and should be increased.

The multi-faceted programs at the senior high school level reveal interesting comparisons. In only one program, Occupational Learning Centers, were direct student outcomes (measured by standardized test instruments) used as success measures. Other programs relied on quantitative measures which reveal little concerning impact on students.

There is evidence that the fiscal affairs of the project have been administered very capably and that maximum utilization of resources has been obtained. Utilization of personnel appears to have been adequate, except there appear to be too many people involved in supervisory activities as opposed to student/program activities. However, a great quantity of work has been accomplished, particularly at the elementary level.

The central administration of the project has been very strong and supportive. This administration has made every effort to bind together the diverse program segments into a cohesive unit. Careful thought has gone into the decision - making procedures and evaluation findings have been accepted and acted upon in good faith.

CHAPTER VI

Implications and Recommendations

The conclusion of the Guided Occupational Orientation Project, at least in terms of support through federal funds, presents new challenges to the administration of the Syracuse City School District.

At the time of this report, administrators had made plans concerning the future of many activities generated by GOOP. These plans are subject to budget and program approval by members of the Board of Education.

Worthwhile activities generated by the assimilation of outside funds into the local school budget is a long-term goal of most federal educational projects. When useful information and data have been systematically gathered and analyzed; when administrators have utilized strong evaluation procedures in decision - making; and when strengths and weaknesses of program components have been recognized, this is the desired outcome.

Current plans call for most major activities of GOOP to continue operations within the Syracuse City School District, supported by local funds.

The Elementary Program

The elementary program will remain almost intact. The Career Center, with the 17 career booths, will be maintained and will serve as a focal point for field trips by sixth graders. The essential function of the Skill Van Trainer will be maintained. These activities will be located in a building to which students will be transported instead of the mobile van. Fifth and sixth grade curriculum units will be duplicated and made

available throughout the district, along with necessary support materials. Adequate staff will be maintained to insure program continuity.

ESI recommendations are:

A. Continue the program components and sequencing as it is for. according to the data, all goals are being achieved.

B. Decrease the follow - up of classes in the program to determine how materials are being utilized.

C. Provide feedback to increase teacher support.

Junior High Program

The junior high school program, centered around curriculum units and resource materials, will remain constant. Two Occupational Resource Specialists will be supplied with local funds to continue supporting teachers and aid in acquiring materials, scheduling field trips, securing classroom speakers, etc.

ESI recommendations are:

A. There should be a re-examination of the entire junior high school program because the data about student changes do not imply that project goals are being met. More succinct goals are needed on each grade - level, with a corresponding, well-defined program to reach the students and produce the desired results.

B. The role of the ORS should be altered to increase classroom involvement in career education as a part of this program. Since ORS personnel provide continuity for the junior high program, its impact is likely to diminish in time without their direct supervision and/or a more structured, goal-directed plan.

C. If written career plans for high school study are still desired, a more systematic approach is needed to aid students in developing a plan. Current approaches are not producing desired results.

D. Increase parental involvement and awareness of the Career Education program to provide more public support and to stimulate teachers and students.

Senior High Program

The employability mini - course offered to senior high school students is being revised and will be packaged for the 1974 - 75 school year so that more students may have access to it.

Occupational Learning Centers will continue with the same assignment and will have adequate staff and resources to perform their role.

The two Occupational Resource Teachers will continue to work with potential drop - outs and under - achievers. They will attempt to increase the work experience of this target population and maintain school attendance through graduation.

Project for the Advancement of Career Education (PACE) will not continue in its present form. Officials of Onondaga Community College have notified district officials that they are unwilling to participate further. However, the interdisciplinary approaches coupled with field trips and work experiences will be maintained for students through high school graduation and some efforts will be made to establish a workable relationship with other post-secondary two year institutions.

ESI recommendations are:

A. The career education alternatives (in addition to the

employability mini - course) for the majority of high school students should be increased to provide students with more opportunity to develop skills and experiences in selecting appropriate career areas by themselves and to increase their employment alternatives.

B. The ORT program should not only be maintained at its present size, but be expanded, because it provides an important single person responsible for dealing with the multiple needs of a pre - drop out student.

C. The OLC program is successful and should be expanded.

D. The idea for the PACE program is excellent, but the program needs to be reshaped. The program administrative style should be altered to be more directive and to deploy a contractual approach with teachers and outside educational institutions to insure obtaining the desired results for students.

ESI evaluators would like to take this opportunity to express our appreciation to, and admiration for, the administrators of the Syracuse City School District. Their wholehearted support of the project has meant much toward the success evidenced since 1971.

We are seldom privileged to work with such a professional group, whose dedication to the goals and objectives of career education is evident in the quantity and quality of their work. We are confident that the continuation of GOOP through local funding by the SCSD will enable student-centered activities to remain consistent and continue to develop with fruitful results.